172 I shall offer no conjectures as to the origin or meaning of these characters. I shall only point out that Humboldt found characters of the same type similarly located on the banks of the Orinoco [105] at a height inaccessible to human hands.

If I remember correctly, this famous scholar is of the opinion that in remote times the level of Orinoco waters rose to a much greater height than today.

I believe that the same deductions reached by the famous German scholar about the Orinoco would apply to the characters of the Upper Tapajoz.

I made a sketch of the characters on the Upper Tapajoz; I do not know whether they are symbolic.

When I showed them to the Mundurucu of Necodemos and Samuuma (Aikã), they all told me that similar characters are to be found in greater numbers on the hills of Areucrê, in the midst of the plains which stretch between Acupari and Necodemos. I had no opportunity to see them.

173 Mundurucu tradition holds that Caru-Sacaebê, after destroying the maloca of Acupari to punish its inhabitants for their ingratitude, went on to found Necodemos, which thus became the cradle of the human race. It was then, according to the same tradition, that he drew those characters between the two villages, as a monument to recall this memorable event. When Caru-Sacaebê left Necodemos, which had become wealthy and powerful, he went down the Tapajoz River and left some further characters on its banks to preserve more vividly among the Mundurucu the memory of his deeds and of his stay among them. [107]

XV

The Mundurucu pronounce sentence of death against sorcerers.-- Some of the more recent applications of this sentence.

177 As late as the beginning of this [19th] century, Portuguese law burned alive in public squares those unfortunate victims accused of being sorcerers by the credulity and superstition of the

192
193

[English]	Mundurucu
to give--unheme	
I give	une unheme
you give	ene unheme
he gives	inhedhe-ate unheme
they [masc.] give	inhedianhe unheme
to be a man--anhocate dhê	
I am a man	une dhê anhocate
you are a man	ene dihê [sic] anhocate
he is a man	inhe dhê anhocate
they are men	inhedianhe anhocate
to eat--uchecune	
I eat	une uchecune
you eat	ene edhuũ
he eats	inhedhêê udhuũ
they [masc.] eat	inhedianhe udhuũ

[128]

[English]	Mundurucu
I'm coming [eu já vou]	udhebeque
regards to yourself [?] [lembranças para ti mesmo]	ecatu dhe euê bê
all Mundurucu are kinsmen	Mundurucus [sic] nheên dhu anhum umain
my soul goes to heaven	ubiumbê cabi cahi dhe
I miss my mother	nheben nexi cahi
I miss my son	nheben opute cahi
I am your friend	une ubei xixi
I shall not see you again	nhan sên ehuame dhei une

197
171

The following table will facilitate comparison of the Mundurucu dialect with the three principal American languages.

[129]

[138]

COMPARATIVE OUTLINE

[English]	Quechua	Aymara	Tupi	Mundurucu
man	runa	haiw	apgaua	aiñocate
woman	huarmi	marmi	cunhã	aiatiate
head	uma	ppekeña	akanga	uiaã
face	ceakilla	Nauna	rua or çuí	ueirupé
eye	nahui	nayra	teçá	ueté
ear	rinri	iñchu	apiçaqua	oembembé
hand	maki	ampara	mbó	uberamã
sun	inti	inti	guaraci	caxi
moon	killa	phakhi	jacy	caxi-ãtc
I	noca	na	ixé or xé	une
water	jacu	uma	y	iribi
he	pay	hupa	abé	iubeadhe
to eat	micumi	manhatha	u	uchecne

171 But they
181 do have one curious custom in common with their neighbors the Maues. They expose their daughters to continuous fasting and to the smoke in the gable of the hut when the latter pass from childhood to womanhood.

284 In agriculture the Mundrucus have an advantage over others only
[64] in as much as the power of their numerous and warlike tribe (I heard a figure of 18,000 given and even one of 40,000) makes their plantations more secure; also the rather dense population make dependence on hunting and fishing alone unfeasible. They grow some cotton and a great deal of manioc. The flour ground from manioc is packed in
[63] baskets and the wide leaves of palms, spice stalks [Wurzschilfe] and heliconias and regularly sold to the mariners in Tapajos now that they have established friendly relations. In the area near the Brazilians
264 each family lives by itself in a conical hut. Today these are often not built individually in isolated places throughout the forest but are grouped into villages. Those Indians not yet in a neighborhood of whites occupy large, open huts as a community of several families. But even in the
[62] mission I found near their houses the preserved heads of slain enemies and numerous skulls of larger game animals stuck up on poles. Everything about the appearance of these savages made it evident that they consider themselves mighty hunters and warriors and that they strive to maintain their hegemony in the area. To this their name has reference.
201 It is from the Tupi language. Mundrucus, Mondurucus means either: "those who plunder together" (from monda "steal," ru "together," cu, co "plantation, property), or: "those who practice (ico) cutting off (mondoc)", that is to say cutting off heads. Moruricus, from mouumm moteryc and ico, means: "the shaker, the thief [Mitschwer]." [301] Very widespread is the nickname Paiquiné, Paia-kyce, that is "Father Knife, Decapitator." Castelnau (III. 106) lists the Aruqés as living among the Mundrucus on both banks of the Arinos, and they are probably identical with the Otopias already mentioned (p. 204, 383) who are also found on the Madeira river.

746 Their military organization is begun in peacetime. Every man capable of bearing arms cuts a notch in a stick that is sent around and by this he pledges his participation in war. In wartime the chief has power of life and death over the individual. That they were in a state of war with the Apiacas was not told me. * For their attacks they

* The Picobyé (in Pohl II. 183) or Paicobejé do not belong here but are a tribe belonging to the Macamecrans.

6: Murphy E-5 (1952-1953)1956
SQ13 Mundurucu SQ13

591 terms, despite combining matrilocality and patrilineality. Contemporary in-
179 formants claim matrilocality to be the normal rule since ancient times, but historical data suggestive of antecedent patrilocality among the Munduruci comes from the German explorers Spix and Martius, who encountered elements of the tribe near the lower Madeira River in 1819. The reader should be warned that these observers are not completely reliable, and several obvious errors were encountered in their works. We can only verify their information by comparing it with what is reliably known of the structure of Munduruci society.

604 According to Martius (1867:393), the Munduruci were apparently patri-
179 local, for a man could eject his wife from the household. Every young man,
591 however, had to go through a period of bride service lasting several years (*ibid*:393). The same writer claimed that when there was no other potential husband available for a young woman, the mother's brother could marry her (*ibid*:393). This is of some significance, not only because it gives historical confirmation for the previous analysis from kinship terminology (and Martius was not aware of the "sociological" interpretation of kin terms), but also because it tends to bolster the hypothesis of antecedent patrilocality. The practice of avuncular marriage is quite widespread in the Amazon basin and in northeastern South America and the Islands (Lowie 1949:317). In all cases, it is correlated with a period of bride service followed by permanent patrilocality. Both Kirchoff (1932:58) and Metraux (1948:111–12) state that avuncular marriage serves to liberate men from the period of temporary matrilocal residence. Whether or not avuncular marriage had this function among the Munduruci is not known, but its wide distribution in the Tropical Forest region in combination with initial bride service and patrilocality argues for its former existence among the Munduruci where, according to Martius, the same pattern was in existence.

604 The reader will remember that contemporary Munduruci informants
121 specifically and vehemently deny the contemporary or past practice of avunc-
691 ular marriage, and this form of marriage was not reflected in genealogies. This is understandable in the matrilocal framework because, although the mother's brother was a member of the opposite moiety to that of his sister's daughter, he was nonetheless a member of the same household until his marriage. In a patrilocal society, the sister's daughter would not reside in the same household and might not even be a resident of her uncle's village. The disappearance of avuncular marriage due to a change from patrilocality to matrilocality would be consistent with much anthropological theorization on the origins of incest prohibitions, whether explained as a result of the necessity to deny sexual access to one's familial intimates, which would disrupt the household (Malinowski 1930:630), or as a result of the need to marry out of the ingroup in order to extend its ties with the larger society (White 1948:425). Titiev (1943:316) has noted the importance of residence in the definition of incest in other cultures:

> "... there are numerous cases in which exogamy is enforced among co-residents even when there is no demonstrable or putative genealogical connection."

7: Murphy E-5 (1952-1953)1957 SQ13 Mundurucu SQ13

Coser (1956:156-7) has considered the relationship between conflict and the rigidity of the social structure, which he defines as "the degree to which it disallows direct expression of antagonistic claims," and concludes:

> Our hypothesis, that the need for safety-valve institutions increases with the rigidity of the social system, may be extended to suggest that unrealistic [i.e. cathartic and not oriented toward the frustrating object] conflict may be expected to occur as a consequence of rigidity present in the social structure.

Mundurucú warfare was clearly "unrealistic" and the social structure was rigid in Coser's sense. It is possible to broaden our example to include a larger category of rigid social structures and to consider their functional concomitants. I would propose as a statistically testable hypothesis that matrilocal societies must repress open aggression in order to insure cohesion and continuity. If we take any matrilocal and matrilineal or bilateral society as our model, the system of residence tends to disperse males at least throughout the local community. Thus, any male will have close ties of kinship and economic interdependence with his housemates, his natal household, the households of his maternal uncles, and the households of his brothers. The same is true of patrilocal societies from the viewpoint of the women, but males are the principal political role-players in all human societies. Any conflict involving men therefore becomes a matter of deep community concern. As among the Mundurucú, if the lines of allegiance in a conflict situation are drawn according to kinship in any matrilocal society, bonds of local contiguity will be sundered; if primary loyalty is given to bonds of residence, the ties of kinship will be broken. In short, when the residence and kin groups of the male do not coincide, he acquires multiple commitments that may come into conflict. Also, the individual male will more readily repress his grievances if he cannot rely upon the full support of a solidary group.

Brief reference to the ethnographic literature suggests that the social solidarity of matrilocal groups is not restricted to my model. Writing of the Apinayé, Nimuendajú (1939:129) says:

> I have never heard of a case of rape nor witnessed anything of publicly scandalous adultery, larceny, or slander. Only when intoxicated do these natives inflict damage on property and bodily maltreatment on persons or commit manslaughter. Compared with any Šerente settlement the village of Bacaba, at least, is a model of internal peace and harmony, and this would hold for Gato Preto, too, in the absence of alcohol.

The Šerente and the Apinayé are Gê-speaking groups of eastern Brazil and are culturally quite similar. The principal difference between them is that the fractious Šerente are patrilineal and patrilocal, while the harmonious Apinayé are matrilineal and matrilocal. Turning to North America, we have the classical example of the matrilocal and "Apollonian" Pueblоans. Ellis (1951:199) has noted of Pueblo warfare:

> Beyond protection, warfare served to provide legitimate outlet for the frustrations and aggressions arising from unpermitted competition or suspicions thereof among peoples of the same general culture.

7: Murphy E-5 (1952-1953)1957 SQ13 Mundurucu SQ13

The repression of open conflict among the Pueblo Indians accounts for the latent hostility that many ethnologists have seen seething below surface relations. Under modern conditions this often results in community fission, and the same process can be noted among the contemporary, nonwarring Mundurucú. Lacking adequate safety-valves for the release of aggression, the Mundurucú now tend to withdraw from the frustrating situation.

Not all matrilocal groups repress aggression to the same extent as do the Mundurucú, nor are they as warlike. The greater emphasis of the Mundurucú upon social cohesion and external aggression stems from the persistence of patrilineal clans in a matrilocal society. This factor, combined with inter-village matrilocality, made hostility even more explosive and internal release systems less workable. It oriented the group toward warfare and provided the organization for its effective pursuit. Some deviation from our model is expectable, for there is no fixed and unvarying reservoir of aggression in society; it has its roots in the social structure, as does its expression. Our thesis states only that matrilocal societies must repress the open expression of intrasocietal conflict and that this repressed hostility, variable in intensity, will be released through acceptable and nondisruptive means within the society, or through warfare, or through both. But warfare, it can be concluded, is an especially effective means of promoting social cohesion in that it provides an occasion upon which the members of the society unite and submerge their factional differences in the vigorous pursuit of a common purpose.

NOTES

[1] The field research upon which this article is based was conducted by my wife and me during 1952–53, and was supported by a Research Training Fellowship, granted by the Social Science Research Council, and the William Bayard Cutting Traveling Fellowship, awarded through the Trustees of Columbia University. Grateful acknowledgement is made to these institutions.

The present article was read in manuscript by David M. Schneider and profited greatly from his suggestions.

[2] This seemingly incredible sortie was still remembered by the Urubú Indians of the upper Gurupí River in the state of Maranhão, according to a personal communication from the Brazilian ethnologist, Dr. Darcy Ribeiro.

[3] A fuller description of the ceremonies held subsequent to a successful raid will be published in a forthcoming monograph (Murphy n.d.).

REFERENCES CITED

Almeida Serra, Ricardo
1869 Navegação do Rio Tapajós para o Pará (1779). Revista do Instituto Histórico e Geográfico Brasileiro 9:1–16.

Ayres de Casal, Manoel
1817 Corografia brazilica. Rio de Janeiro.

Bates, Henry W.
1863 The naturalist on the river Amazons. London.

Chandless, W.
1862 Notes on the rivers Arinos, Juruena, and Tapajós. Journal of the Royal Geographic Society 36:119–128.

Coser, Lewis A.
1956 The functions of social conflict. Glencoe, The Free Press.

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Fowlanguage NHL

Reprinted for private circulation from
ECONOMIC DEVELOPMENT AND CULTURAL CHANGE
Vol. IV, No. 4, July 1956

TAMING AND TAMERS: PARALLEL PROCESS IN ACCULTURATION[1]

I. The Problem

The purpose of this paper is to show how two cases of acculturation exemplify parallel processes of culture change, that is, cross-cultural regularities of function and causality, even though differences in cohoort form and substantive content are such that the acculturation might also be considered as convergent development.

In subsequent sections will show in detail, the Mundurucú of the Tapajós River in Brazil and the Montagnais in Canada differed during pre-contact times in social structure, in the general nature of their cultures, and in their cultural ecological adaptations. The first were tropical forest hunters and horticulturalists, living in semi-permanent villages and given to warfare. The second were hunters of large migratory game and were loosely organized in nomadic bands. Despite these differences, however, both represented roughly the same level of sociocultural integration. That is, individual families were related to one another through certain supra-familial patterns--village activities in the one case and band functions in the other--but the local unit in each instance was politically autonomous.

Since this paper is essentially an illustration of methodology, it is important to stress that the concept of level does not classify cultures according to concrete and substantive form and content. Different cultures may be wholly unlike in their particulars in that they are the products of distinctive area histories or traditions and of local adaptations to environments. At the same time, the largest integrated and autonomous social units may be of a similar order of inclusiveness. While, therefore, similarity of level must underly formulations of cross-cultural regularities, such similarity alone does not at all imply typological identity. The Aboriginal tropical forest Mundurucú and the sub-arctic Algonkian hunters were wholly unlike in most cultural particulars and in social structure, although both were integrated on comparable sociocultural levels.

They were alike, however, in the acculturation processes to which they were subjected and in the final cultural type which is now emerging in both populations. The processes were similar in the special manner in which outside

---

1. The acculturational phenomena described in this article were apparently found among many, although not all, Northeastern Algonkians, including native groups of New England as well as Canada. Speck, Steward, and others have considered this problem for many years. They were also found among certain Mackenzie Basin Athabaskans, as Jenness has shown. A very comparable case of acculturational process was studied by Steward among the British Columbia Carrier. These cases will be cited in the concluding comparative section. The Montagnais are taken as our principal example because Eleanor Leacock studied them in detail from this point of view.

The Mundurucú of Brazil are analyzed on the basis of a year of field research by Yolanda and Robert Murphy during 1952-53. The research was conducted under the sponsorship of the Department of Anthropology, Columbia University, and was made possible by a Research Training Fellowship granted by the Social Science Research Council and the William Bayard Cutting Traveling Fellowship, awarded through the Trustees of Columbia University.

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Montagnais NH6

Mo
Mu
121
171

commercial influence led to reduction of the local level of integration from the band or village to the individual family and in the way in which the family became reintegrated as a marginal part of the much larger nation. The resultant culture type was similar in each case in that the local culture core contained the all-important outside factor of almost complete economic dependence upon trade goods which were exchanged for certain local produce and because the functional nature of local production, the family, and other features were directly related to this new element. The common factor postulated to have caused importance as a kind of economic activity--the collection of wild produce--which entailed highly similar ecological adaptations. While rubber production differs so greatly in particulars from fur trapping as the tropical forests differ from the sub-arctic barren-lands of Labrador, the result of the acculturative processes in the two cases was the independent emergence of the same type of culture, as defined in terms of level of integration and culture core. We shall use the latter term to denote the structural interrelationships of the basic institutions of the culture.

This case study should also help clarify the heuristic concept of cultural ecology, and especially to illustrate how fundamentally it differs from environmental determinism. It will be shown that total environment is in no way the decisive factor in the culture-environment relationship. In analyzing the creative processes in the adaptation of culture to environment, it is necessary to determine the crucial features in the environment that are selectively important to a culture of a particular level and a particular area tradition. In this sense, it does not matter how different the subarctic and the tropical forests are in their totality. The primary fact is that each environment afforded a resource for trade purposes which could best be exploited by individual families controlling these products within delimited territories. These products did not achieve importance until the native populations became parts of larger sociocultural systems and began to produce for outside markets in a concentrated pattern.

The process of gradual shift from a subsistence economy to dependence upon trade is evidently irreversible, provided access to trade goods is maintained. It can be said, therefore, that the aboriginal culture is destined to be replaced by a new type which reaches its culmination when the responsible processes have run their course. The culmination point may be said to have been reached when the amount of activity diverted to production for trade grows to such an extent that it interferes with the aboriginal subsistence cycle and associated social organization and makes their continuance impossible.

II. Northeastern Algonkians

Mo
114
177
423

Our discussion of the acculturation of the Northeastern Algonkians assumes that the family-owned fur-trapping territories widely reported among these Indians were post-white in origin. The supposition of Speck [1923; 1935; 1942], Cooper [1939], and Eiseley [1939; 1942; 1947] that such territories were aboriginal lacks support in early historical documents. Moreover, indisputable cases of post-white formation of family territories have been reported by Leacock among the Eastern Montagnais [1954], Jenness among certain of the Montagnais Basin Athabaskans [1932, p. 29], and Steward among the British Columbia Carrier [1941]. Leacock's study [1954] deals with the processes of development of trapping territories in greatest detail and consequently provides the most illuminating material. We shall constantly refer to it in the following delineation of the aboriginal culture core and the subsequent changes in it.

Mo
621

According to Leacock, the Eastern Montagnais formerly possessed very loosely integrated bands. The basic aboriginal social unit was the "multi-family" winter hunting group consisting of two to five families. These groups were nominally

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Montagnais NH6

problem of acculturation toward individual families has not been adequately described for South America.

The Munduruc have been in active contact with European civilization for the last 160 years, of which only 60 years have been spent in rubber exploitation. The following description of the pre-rubber period Munduruc does not purport to depict the pre-contact, or aboriginal, Munduruc, but refers to the middle of the nineteenth century. Earlier changes in Munduruc culture form the subject of another paper [Murphy 1956].

The Munduruc have inhabited the gallery forests and savannah lands east of the upper Tapajos River in the state of Para, Brazil, for at least two centuries. The savannah in this region is quite limited, and the predominant flora are the high forest and thick vegetation typical of the Amazon basin. The Munduruc chose the open country for their villages because remoteness from the larger streams afforded some protection from river-born enemy attack and relief from the swarms of insects which infest the river banks, while the absence of forests immediately adjoining the villages gave some security against the foes surprise attacks favored by nearly all tribes of the region. These attacks were difficult to launch without cover. Since the Munduruc used water transportation only slightly, isolation from the rivers was not a hardship.

It has been noted that the nineteenth century Munduruc and Northeastern Algonkians were on the same level of sociocultural integration. The simple, loosely-structured nomadic hunting bands of the Algonkians were roughly equivalent to the semi-sedentary villages of the Munduruc. In both instances, the local group consisted of a multi-family, autonomous community. Under certain circumstances, the various Munduruc villages tended to integrate on a tribal level, but there were no permanent trans-village political controls. That no Munduruc village could function in isolation, since there was inter-village marriage and periodic cooperation in warfare and ceremonialism, does not necessarily imply a higher level of integration in economic or political activities. Similarly, it can be argued that Northeastern Algonkian bands were autonomous but by no means isolated from other such units.

The Munduruc and Algonkians were integrated on the same level, but their cultures differed structurally or typologically and in content. Patrilineal clans and societies in Munduruc society made kinship ties more extensive and permanent. Village subsistence was based on slash-and-burn horticulture. Although the heavy work of clearing the forest was done by work groups consisting of all the village males, garden care and manioc processing were carried out by the women of the matrilocal extended family. The chief occupations of the men were hunting and warfare.

Leacock's reconstruction of the aboriginal society of the Eastern Montagnais shows the nuclear family to have had greater functional importance than among the Munduruc. The Montagnais family was a relatively stable unit within the shifting and amorphous hunting bands, whereas the Munduruc pattern was the converse. Each Munduruc household was a stable unit composed of women and their female offspring. The Munduruc had the seeming paradox of matrilocal extended families in a society of patrilineal clans and societies. The men married into these extended families from similar units in the same village or from other villages. However, there was no need to integrate a husband into the extended matrilocal family of the household, because the focus of his activities was the men's house. All males upon reaching adolescence slept in the men's house, which was located on the western perimeter of the circle of houses composing the village. The females of each household prepared and sent food to the men's house to be eaten in a communal meal. The men's house was also the center of male work and relaxation. The most immediate economic tie of a man to his wife's house was that he brought his daily take of game there. Communal distribution of game, however, made this economically

431 Munduruc trade chiefly in manioc flour and wild products, and rubber was of secondary importance. Chandless' observation [1862, p. 277] that in 1860 the Munduruc of the upper Tapajos "trade in salsa and sell provisions to the parties of India-rubber makers" indicates that important trade in articles other than rubber continued at least until 1860. Shortly after this date, however, the tempo of rubber extraction in the Amazon quickened, and in 1875, as Tocantins' account shows [1877, pp. 131-134], rubber was the most important Munduruc product.

177 439 With the advent of the rubber trade, Munduruc acculturation entered its second stage. During the first, when trade in manioc flour and certain wild products predominated, the hereditary chief mediated between the traders and his people, aboriginal social patterns were largely unchanged, and warfare was still vigorously prosecuted, frequently under the sponsorship of traders and colonial authorities. During the second stage, which lasted until 1914, warfare abated, the size of villages decreased owing to migration and European-introduced diseases, and the position of the hereditary chief was weakened by the imposition of appointed "chiefs". The period was characterized by a "lessening" of integration rather than by a change in mode of integration, or structure.

221 314 [71] Work in the rubber economy in the latter half of the nineteenth century did not upset the annual subsistence cycle as much as might be expected. Whereas many people had formerly left their villages during the dry season to hunt and fish along the streams, they now left to collect rubber. As in times past, they cleared their gardens sites before leaving and returned to the village in time to burn them over and plant. The necessity to provide all their own subsistence limited the rubber producing season to three months, mid-June to mid-September, out of a possible seven. This parallels closely the earlier phases of Northeastern Algonkian fur production, when the Indian's need to obtain their own meat supply by aboriginal cooperative techniques limited fur production and conflicted with their increasing desire for Western manufactures [Leacock 1954, pp. 25-28].

439 177 [224] During the nineteenth century (and to the present day) the Munduruc, like the Algonkians and in fact most aborigines, had been acquiring a seemingly insatiable appetite for the utilitarian wares and trinkets of civilization. Firearms increased their efficiency in warfare and hunting, especially the latter. Communal hunting carried on during the rubber season when one or two families lived in isolation adjacent to their rubber trees. In communal hunts, the game could be surrounded and the range and velocity of the weapons were not so crucial to success. Other items, too, became necessities to the Munduruc. Contrary to popular belief that nudity is beneficial to tropical peoples, there are various reasons why clothing is desirable in the Amazon. Insect stings greatly annoy the Indians, and at night the temperature drops to from 55° to 65° F. Clothing, however, is expensive, and only in recent years has it been used consistently in some Munduruc villages. The movement toward covering the body entailed the development within two generations of a sense of shame comparable to that of Europeans. The Munduruc, especially the women, have also acquired a desire for finery for the sake of display. They have also developed a taste for many strictly non-utilitarian goods, such as the Brazilian raw cane rum and the beads and ornaments purveyed by the trader.

[291] A full and adequate description of the growth of Munduruc dependence upon trade would require a separate treatise, for reliance upon manufactured goods entailed further dependence upon many adjuncts of these goods. For example, firearms required powder and lead, while garments of factory-woven cloth had to be made and repaired with scissors, thread, and needles. The substitution of metal pots for native ones of clay and of manufactured hammocks for the native product has reached the point where many young women now do not know how to make these articles. The Munduruc barely remember that their forebears used stone axes and bamboo knives, and they would be helpless without the copper roasting pan used to make manioc flour.

[46 323]

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Montagnais 1946

to the disorganization of Curuá River society. The political authority of appointed "chiefs" was now a means of extending the influence of the whites. The continuing migration of young men from the remaining primitive villages of the savannahs caused an oversupply of men on the Curuá River, and conflicts over women became rife. Owing to the endless squabbles in villages which had lost their aboriginal basis of integration, dissidents moved off to live at their rubber grounds or formed new and smaller villages. This fission process is still going on. Concomitantly, the Mission and the Indian Post are becoming more important as focal points in a new mode of integration of the Munduruca. Over one-third of the Curuá River population make their rainy season homes at these agencies, which serve as centers of trade and of social and religious gatherings. It is from the Post and Mission, also, that the lines of authority now radiate.

IV. Comparison Summary

The accompanying table and chart present the major phases of acculturation in summary form, as abstracted from the historical continua. The basic acculturative factors in both cases exerted parallel influences, although the two societies were substantively different until the final culmination was reached. There were four causal factors common to each. First, both became involved in a mercantile, barter economy in which the collector of wild products was tied by bonds of debt and credit to particular merchants. Such involvement also occurred widely among native peoples who produced crops or livestock. This arrangement must be distinguished from cash transactions, in which, owing to the impersonality of money as a medium of exchange, the primary producer has greater freedom of choice as to with whom he will deal. In a pure credit-barter economy, all transactions are based on a personal relationship between the principals; the merchant must be able to rely upon the continued patronage of the primary producer whereby the latter liquidates past debts while assuming new ones. It seems to be a basic procedure that the pre-literate Indian is kept in debt by the trader. While the latter can manipulate accounts at will, and no doubt is frequently guilty of malfeasance, he usually allows the Indian to buy beyond his means. The debtor-producer in selling his future production, and the creditor will not extend payment unless assured of delivery. Where such an economy is found, it is common for merchants to refuse to deal with primary producers who are in debt to another merchant. This is a "gentleman's agreement" in the Amazon, although it is frequently violated by unscrupulous traders. Second, the growing ties of dependency upon the traders arose at the expense of collective bonds within the respective societies. Reliance upon individuals and institutions outside the native social system are intensified by a steady increase in demand and need for manufactured goods. This, as we have seen, goes beyond the mere initial allure of Western tools and ornaments. Luxuries soon become necessities--a process that can be found in our own culture. Third, while crude latex and animal furs are very unlike articles, they imply a common cultural-ecological adaptation. Both are natural products having a reliable occurrence in worthwhile quantity within an area which can be most efficiently exploited by one man. Both require conservation, for careless exploitation can seriously reduce the number of furbearing animals, or render rubber trees worthless. The producer has an incentive to maintain the productivity of his resources. Finally, both rubber trees and fur animals are sufficiently dispersed to require that persons exploiting them live or work at some distance from one another.

These factors of change were essentially the same among both Munduruca and Montagnais, and they were introduced through contact with the outside world. Their initial effects upon the aboriginal cultures were somewhat dissimilar, owing to aboriginal differences between the two groups. Whereas the Munduruca chief served at first as intermediary with the trader, this seems not to have been true of the Montagnais chief. Montagnais family heads, however, traded on behalf of their sons. For a short time, this pattern was followed by many

[text continues on p. 349]

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Montagnais NHL

Mo
M4
171
177
105

Tabular Comparison

Mundurucú	Montagnais
1. Pre-rubber	1. Pre-fur
Village consists of men's house, matrilocal extended family households; population divided into patrilineal clans and moieties. Village males form collective hunting and garden-clearing group. Household females form the horticultural unit. Intensive warfare for headhunting and as mercenaries allied to whites; partial dispersal of villagers in dry season for fishing and war. Chief the war leader and representative of village in trade of manioc flour.	Nomadic composite band hunts large migratory game animals. Frequent band breakup during winter scarcity. Amalgamation of several winter groups for summer hunting and fishfishing. Chieftainship weak and shifting--leader of winter group; no summer band chief. Residence bilocal, frequent shifts of winter group membership.
2. Marginal involvement	2. Marginal involvement
Chief continues as mediator with trader, but is now often trader-appointed--trader gains influence. Dry season population dispersal for rubber production rather than fishing and war--war continues, but lessened in importance. Basic pre-rubber economy and settlement pattern unchanged. Continuing displacement of aboriginal crafts.	Trade by family heads--leaders do not trade for followers. Trapping secondary to subsistence hunting--subsistence still gotten traditionally, basic social patterns persist. No trapping territory. Linkage to trading posts.
3. Transitional	3. Transitional
Further displacement of native crafts, increased need of trade goods, increased dependence on trader. Chieftainship undermined due to new type chiefs who now represent the trader. Agricultural cycle and village life inhibit larger rubber production. Trend toward individual trade.	Further displacement of native crafts, increased need of trade goods, increased dependence on trader. Increased fur production interferes with subsistence hunting. Individual trade conflicts with group solidarity.
4. Convergence and culmination	4. Convergence and culmination
A. Intermediate Move to new villages in rubber regions. Chief now intermediary with Indian agent and missionaries. Individual trade, individualized subsistence economy--end of men's house and traditional village--	Fur trapping now predominant; winter provisions purchased Winter groups not necessary with end of collective hunt--family or individual hunting gives greater efficiency, allows conservation. Shift of economic interdependencies from group to trader.

8: Murphy & Steward E-5 (1952-1953) 1956

SQ13 Mundurucu SQ13

Montagnais NH6

Mo Mu ● 171 ● 177 105

Munduruc (cont.)

village held together only by weakening his ties and sociability.
Centripetal factors (e.g., sorcery, sexual rivalry) cause fission of these villages and results in B, below.

B. Dispersal (follows upon 3 or 4A)
Leadership no longer integrative.
Individual trade undercuts his obligations.
Conflict with agricultural cycle resolved by moving to rubber avenue—family now in isolation except for trade bonds.

Montagnais (cont.)

Emergence of a chief who serves as intermediary with Indian agents and missionaries.
Nuclear family basic unit at all times of year.
Trapper maintains and transmits right to a delimited hunting territory exploited only by his family.

Mo Mu 171 177 [431 622]

Munduruc during the period immediately after the Munduruc chief had ceased to act as intermediary with the trader. After the breakdown of extended kinship bonds in both groups, individuals traded completely on their own.

Mo Mu [603]

The native kinship organization persisted longer among the Munduruc than among the Montagnais, and this has been a factor in perpetuating village life today among the less acculturated Indians east of the Tapajós River. Aboriginal Munduruc kinship structure was more extensive and socially integrative than that of the Montagnais. Moreover, the aboriginal production of subsistence crops survives even among Munduruc families living in isolation in their rubber avenues. The Munduruc still produce all their own subsistence, although there are some changes in emphasis, technique, and organization.

Mu 177 431

The Brazilian rubber tapper—the white man who has gone into the forest or the Indian of mixed blood who is completely acculturated and connected to the mercantile economy—usually buys all his food from the trader and devotes the season when he could be growing his own food to tapping rubber or to working off his debt to the trader by performing personal services. At present, we know of only one case of a Munduruc who bought most of his food, but we can confidently predict that, as the population becomes more acculturated toward dependency in all ways upon the larger society, an ever-increasing number will buy food. When they are no longer able to feed themselves by their own efforts, they will have effectively become colonos, or neo-Brazilian 'caboclos'.

Mo Mu 171 177 513

The acculturative factors operated in two somewhat different ways among both the Munduruc and Montagnais. First, they created a succession of modifications in the native societies, which gradually converged toward typological identity in the final family level. Second, during this evolution of the total group they produced deviant families which broke away from their fellow tribesmen to devote themselves entirely to tapping or trapping. It was not until the processes had nearly reached their culmination that the surviving but greatly modified native society began to disintegrate.

Mo Mu 171 177 621 622

Among the Munduruc the bonds of leadership and kinship had undergone a steady and slow attrition during one hundred years. The end of warfare had robbed Munduruc culture of a great deal of its vitality, and the chief was reduced to a mere figurehead, manipulated by the trader and the religious and governmental agencies. Work in the rubber avenues and dependence upon the trader had served to sever and weaken ties within the society. At the final point of transition to isolated residence, and total divorce from traditional communal life, the Munduruc were not much more closely integrated than the Montagnais.

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Montagnais NHL

Mo
Mq
177
S94
621

The culmination of the long acculturative processes shows a high degree of structural parallelism. Both Mundurucu and Montagnais populations are divided into loosely integrated and dispersed communities centering about particular trading posts with which the individual families have ties. The Indians still recreate, associate, and intermarry with one another, but the nuclear family is now the stable socio-economic unit. It is the highest level of integration found among the native population itself, but it is linked to the nation through the intermediary of a regional economy. The integration of the family with the national level is highly specialized and limited. These families do not yet share a substantial part of the common denominator of the national culture or even of the regional sub-cultures of their non-Indian neighbors.

Mo
Mq
177
184

There is a final phase, which, though occurring at different dates in the different localities, is characterized by assimilation of the Indians as a local sub-culture of the national sociocultural system and virtual loss of identity as Indians. At this point, the acculturational processes and results diverge, since the Indians participate to a much greater extent in the national culture. So long as the families maintain their marginal relation with the national society, they are quite unlike the basic populations of the nations in which they lived and much more like one another. When, however, they learn the national language, intermarry extensively with non-Indians, and acquire many of the non-Indian values and behavior patterns, they have to be classed with the special regional sub-cultures that have developed in portions of these nations.

CED

It can be predicted that the drastic shift in mode and level of integration will do much to hasten the loss of cultural distinctiveness. Fortes has cogently expressed the relationship between social structure and formal culture content in such a situation:

> "I would suggest that a culture is a unity insofar as it is tied to a bounded social structure. In this sense I would agree that the social structure is the foundation of the whole social life of any continuing society.....The social structure of a group does not exist without the customary norms and activities which work through it. We might safely conclude that where structure persists there must be some persistence of corresponding custom, and where custom survives there must be some structural basis for this" [Fortes 1953, pp. 23-33].

9. Further Comparisons

Mo
Mq
171
177
121

We can delimit and refine the Mundurucu-Algonkian parallel by the cross-cultural examination of structural changes caused by acculturation in other areas. We will not seek further parallels, however, but will discuss cultures in which divergence appears manifest. One instance of such apparent divergence is the Northwest Coast, where the fur trade at first strengthened or intensified rather than weakened the aboriginal social structure. The florescence of the potlatch and class system on the Northwest Coast as a result of new wealth in trade goods is a thesis which has been ably expounded by a number of students [cf. Barnett 1938; Drucker 1939; Collins 1950; Codere 1950]. It would be very misleading, however, to consider any trade in furs as the crucial factor. What really matters is individual trapping of fur-bearing animals. The sea otter was the principal fur bartered by most Northwest Coast tribes, and collection involved neither individual effort nor delimited territories. The amount of land trapping was probably fairly limited and in any event did not offset the cultural effects of the great salmon wealth which created surpluses rarely if ever paralleled by hunting, gathering, and fishing people.

The trapping activities of the Skagit of Puget Sound were nearly paralleled those of the Northeastern Algonkians, according to Collins description [1950, p. 338]:

8: Murphy & Steward E-5 (1952-1953) 1956

SQ13 Munduruçu SQ13

Montagnais NH6

Mo
M4
171
177
121

"The [trading] posts played an important part in altering the economy of the Indians. First, they encouraged a shift in their hunting habits. The skins in which the traders were most interested were beaver and land otter. These animals had small value in the aboriginal economy, since they were less desirable for food than deer or elk, for example. At the traders' behest, however, hunters pursued these animals eagerly. Another economic shift took place when the hunters, instead of killing game for meat, began to exchange skins for food."

The result of this trade was, however, quite different from its effects in Eastern Canada.

"The effects of these changes upon Skagit social organization were pronounced. Distinctions in social rank began to be more marked--a shift made possible since, though social mobility had always been within the grasp of any person of good descent who could acquire the distinction of wealth, new sources of wealth were now available" [Ibid., pp. 337-338].

The new wealth acquired by the Skagit was funnelled into the class structure and ultimately the potlatch. The difference, then, between the processes of change which occurred among Northwest Coast and Northeastern Canadian groups is that the former integrated the new wealth into a *pre-existent* class structure created and perpetuated by a fishing economy. Among the latter, since there were no cultural means or goals promoting the concentration of surplus wealth in the hands of a select few, the benefits redounded to all persons. The same was true of Munduruçu society which also was unstratified. The differences between the Skagit on one hand as opposed to the Munduruçu and Montagnais on the other are attributable to the stratification of society among the former, which in turn is partially explainable by the greater aboriginal resources of the Skagit. In effect, this constitutes a difference of level of socio-cultural integration.

The impact of trapping upon a pre-existing social structure can be even better appraised among the Carrier of the interior of British Columbia, where the wealth in salmon was far less than on the coast. The fur trade among the Blackwater River Carrier involved intimate interaction with Northwest Coast groups, especially the Bella Coola. Goldman summarizes the effects of this contact upon the simple, bilateral Carrier hunting bands [1941, pp. 416-417]:

"Undoubtedly the Bella Coola, like all Northwest Coast tribes, became relatively wealthy as a result of this trade. And in Bella Coola where wealth was the decisive factor in building rank, the fur trade must have been particularly welcome. And the lowly interior Carrier who trapped for furs in order to trade with the Bella Coola, who traded them to the whites, became an important part of the scheme of elevating one's rank. Although a Bella Coola did not gain valuable prerogatives from a Carrier son-in-law, if he could get a monopoly upon his furs he could make enough wealth to purchase new prerogatives. And so the Bella Coola benefited by this trade, so did the Alkatcho Carrier. The latter took up products obtained on the coast and traded them to the Carrier villages eastward on the Blackwater River drainage. As they obtained guns and steel traps, economic productivity spurted so that they were able to build up the necessary property surpluses for potlatching. Potlatching obligations in turn stimulated economic activity, and the degree to which they were able to potlatch made possible the full integration of crests as honorific prerogatives.

Given our previous hypotheses, developments more or less parallel to those in Eastern Canada might be expected. But these Carrier did not trade with European traders; they dealt instead with stratified Northwest Coast tribes in the context of an economic system, the rationale of which was the validation of rank by potlatch. As the following example of the Stuart Lake Carrier suggests,

8: Murphy & Steward E-5 (1952-1953) 1956
SQ13 Mundurucu SQ13
Montagnais NH6

Mo
Mu
121
171
177

direct trade with the whites and the end of potlatching result ultimately in the family trapping territory system.

The effect of the fur trade among the Carrier of Stuart Lake to the north of the Blackwater River ran a similar course to culminate in family trapping territories, according to Steward's research. In pre-white times, the wealth of salmon fisheries, although far less than those of the coastal tribes, had provided some surplus, while contacts with the Tsimshian of the Skeena River had introduced a pattern for channeling this surplus to nobles who controlled the fishing rights of large territories in the name of matrilineal societies. This wealth circulated through small-scale potlatches. The fur trade, carried on directly with the whites more than through coastal contacts, created a new source of wealth and intensified the native pattern. Although furs were trapped by individual society members, a noble had rights to certain percentage of the furs taken in his society's territory.

In the course of about 50 years, however, several processes combined to bring about individual trapping territories as among the Indians of eastern Canada. Most importantly, the new wealth in trade goods brought northward that was of value to individuals. Pressures mounted to force the nobles to divide the trapping territories among their own children rather than to pass them on intact to their sister's sons, who had traditionally inherited their titles and rights. This process was aided by the activities of the Catholic missionary-ethnologist Father Morice, who effectively undermined the native religious sanctions of the class of nobles, and by the government, which banned potlatching. The older pattern survives only in isolated localities, where it is carried on clandestinely. At Fort St. James on Stuart Lake, where there is located a Hudson's Bay Trading Post and some few hundred whites and Indians, the processes have reached a culmination almost identical to that of the Montagnais.

> "Present-day Carrier society at Stuart Lake consists of individual families that have exclusive rights to certain trap-lines that are registered with and protected by the Provincial Government. The family is the kinship and economic unit" [Steward 1941, pp. 909-910].

It seems likely that the Blackwater River Carrier have not yet reached the final stage of acculturation. The same may be true of the Sekani. The critical consideration is whether wealth in salmon among these tribes was so great that it offset the importance of trapping. This was not the case at Stuart Lake. On the lower Skeena River, salmon are so important that canneries have been built, and the Tsimshian and Tlingit have given up fur trapping to become commercial fishermen and cannery laborers.

Certain Plains Indians in North America also engaged in the fur trade but developed in distinctive ways. This is another illustration of the need to examine specific features in the taking of furs. There is a significant ecological difference between the collection of fur on the Great Plains and in the coniferous forests of Canada that lies essentially in the difference between hunting and trapping. It is incomplete and misleading therefore to make comparisons simply on the basis of "fur trading". In the Great Plains, buffalo hides were the chief item traded, whereas in eastern Canada, small, non-gregarious and non-migratory animals were trapped. The trade on the Plains resulted in an emphasis upon the buffalo hunt beyond the needs of subsistence and served to strengthen the collective and cooperative techniques traditionally used in the pursuit of migratory herds. Moreover, band cohesion in the Plains was enhanced by acquisition of the horse and gun and by intensification of warfare, the latter carried on in part to obtain horses.

It is possible that a non-stratified society which acquires surplus wealth may develop a class structure, but this involves special conditions not ordinarily

8: Murphy & Steward E-5 (1952-1953) 1956

SQ13 Mundurucu SQ11

Montagnais NH6

Behavior Theory W3

Mo Mu 121 171 177

found among collectors of wild products. Some of the North American Plains Indians showed an incipient development of a class society in the late eighteenth and early nineteenth centuries, but the tribes were decimated by epidemics and overwhelmed by the advancing frontier when intensified wealth and significant prestige differences had begun to emerge. A parallel between the Plains and the Mundurucu can be found in the increased authority of chiefs owing to their functions as intermediaries between the traders and the Indians. Ashley notes such a florescence of political controls among the Cheyenne [1881, p. 86], and Lewis specifically states of Blackfoot trade [1942, p. 42]:

> "In periods of monopoly [of the Indian trade by one company] the fur trade has a positive effect, that is, it increased the prestige and authority of the chiefs. In periods of competition it has a disruptive effect, that is, it weakened the power of the chiefs."

The Plains band chief traded a commodity which was obtained by collective effort. The Mundurucu chief served as middleman in the pre-rubber period when trade in manioc flour, which was also communally produced, was of primary importance. But he eventually lost his position when individually produced rubber became predominant. The Tenetehara Indians of northeastern Brazil have been in contact with civilization longer than the Mundurucu, but, according to Wagley and Galvao, the village chiefs and extended family heads still have a central role in the trading of collectively produced manioc flour and palm oils [1949, pp. 20-21]. It seems apparent that, lacking some other basis for political authority, it is difficult for leaders to maintain control over trade in individually-produced goods.

W 121 177 439

Our formulations, in effect, state that when certain acculturative factors, defined functionally rather than formally, are present, the core of a culture will change in expectable and predictable ways. These formulations assume the concomitancy of certain other preconditions, which, though well worth investigation of themselves, can be regarded as given factors for methodological purposes.

This can best be exemplified in our present cases by reference to the basic, though incompletely explained, acculturative factor common not only to the Mundurucu and Montagnais but to most primitive peoples throughout the world. This factor can be stated simply as follows: When goods manufactured by the industrialized nations with modern techniques become available through trade to aboriginal populations, the native people increasingly give up their home crafts in order to devote the bulk of efforts to producing specialized cash crops or other trade items in order to obtain more of the industrially made articles. The consequences of this single though world-wide factor are enormous, even though they vary in local manifestation. The phenomenon is of such a high order of regularity that special explanations must be sought for the few departures from it.

The main hypothesis arising from the present study is that: When the people of an unintegrated, native society begin with their products trade to advance their civilization and obtainment through individual effort, the structure of the native culture will be destroyed, and the final culmination will be a culture type characterized by individual families having delimited rights to marketable resources and linked to the larger nation through trading centers. Yaqui, Trumpets, and no doubt other collectors come under this general statement.

Robert F. Murphy

University of California
Berkeley

Julian H. Steward

University of Illinois

11: Murphy E-5 (1952-1953) 1958
SQ13 Mundurucu SQ13

stone and alive and strong. The *wirabú* is evidently a rather abstract notion of a mystic force that is an attribute of many classes of beings. But beyond this minimal explanation there is a degree of permissible deviation in interpretation. Some informants said that the *patcha ñi* was a *wirabú*, but others said that it was merely found in a *wirabú*. Another body of conflicting information pertained to the belief that there was only one *patcha ñi* but that it could simultaneously be found in many places. Again, a minimal explanation was given that there is but one *patcha ñi*, but it is divided into many. Deeper questioning drew rather different answers from different informants. In this, and elsewhere, I have given the most common explanation. It is to be understood, of course, that a range of variant belief and practice is to be found in all aspects of culture.

Evil Spirits

In spite of the great power to do harm possessed by the spirits associated with the animal world, the Mundurucú do not look upon these supernaturals as inherently evil or malignant. They attack people only when unjustly provoked and are beneficial when properly propitiated. Since man knows the rules that must be followed to maintain the benevolence of the spirits of the animal world, their vengeance is due to human frailty and not to supernatural caprice or malevolence. The proper attitude toward this class of supernaturals is one of respect and caution, and not of intrinsic fear.

However, the Mundurucú believe in other spirits, some of which are dangerous at all times and which attack humans without provocation. The most powerful of these is the class of spirits called *Turupuri*, belief in which is extremely widespread among the Tupian-speaking peoples of South America. The Mundurucú recognize three types of *Turupuri*. The first is said to be composed of the real *Turupuri* and includes the souls of people who have been killed by attacks of the *Turupuri*. Another type of *Turupuri* is that created by sorcerers to accompany their souls on predatory journeys. These *Turupuri* are neither as prevalent nor as powerful as the first type, but they are, nonetheless, greatly dreaded. The last category of *Turupuri* includes the fresh-water porpoises that inhabit the Amazonian rivers. The porpoises are believed to swim in the rivers only by day; at night they are transformed into handsome men or beautiful women who dress in white clothes and travel on land. These are believed to be the least dangerous of all the *Turupuri*, although they are still considered malevolent and capable of attacking humans.

Mundurucú shamans report that the porpoise class of *Turupuri* frequently complains to them that the other *Turupuri* are the real demons and that they themselves suffer from their assaults. This third class of *Turupuri* is distinguished from the first two types by other characterization, also. Only the porpoise-spirit travels on land; the others travel through the air. The porpoises are visible to all people in their nocturnal human form, and their beauty frequently leads the unwary to approach too closely. The sorcerer-created *Turupuri* and those whose lives and souls were taken by the *Turupuri*, however, are invisible to all but the shaman.

11: Murphy E-5 (1952-1953) 1958
SQ13 Mundurucu SQ13

776 825 These Turupari make a thin, whistling noise as they travel through the air. Though the porpoise Turupari are handsome, shamans report the others to be ugly beyond description. A further distinction between the porpoise and the other Turupari is that the latter have no fixed abodes, whereas the porpoises have cities at the bottom of deep quiet stretches of the Tapajós River.

776 753 All types of Turupari travel only at night. They frequently lurk on the peripheries of villages, and, consequently, few Munduruci venture beyond the circle of houses after dark. The weapon of the Turupari is a magical stone that it throws at anyone who comes within range. The stone is believed to enter the victim and invariably to cause fever, pains in the stomach and sides, and vomiting. The stones vary in size; the larger ones are thought to be the more powerful. Also, the amount of damage done by the stone depends on the distance from which it is thrown. If the Turupari is within fifteen feet, death is almost instantaneous. At longer ranges, only temporary illness may result.

776 755 There are no means by which attacks of the Turupari can be prevented, but Munduruci shamans have techniques for extracting the harmful stones. Extreme care must be taken in this treatment, for the stone maintains its malignancy even after being extracted. Only smaller stones can be touched with the bare hands, and even these must be treated gingerly. The stone, however, is afraid of the bow, and the bow is frequently used to drive the stone into a fire, where it is destroyed.

776 791 It was extremely difficult to obtain full information about the Turupari while in the field because the Munduruci informants hesitated even to speak of this spirit. To mention it was believed dangerous, and it was also considered to be such a frightful subject that any prolonged discussion of it was in poor taste. This attitude caused a curious situation among the missionized Munduruci. The priests translated the Devil as Turupari, and their sermons to the Indians were replete with references to the greatly feared demon and threats that sinfulness would be punished by condemnation to the "fire of the Turupari." They were evidently ignorant of the full range of Turupari beliefs shared by the Munduruci and were accordingly unaware of the acute discomfort and revulsion aroused in their listeners.

776 825 One of the commonest beliefs of Turupari in the Amazon Basin is that of the fresh-water porpoise transformed at night into a forest demon. Among the Brazilian *caboclos*, or backwoodsmen, the porpoise is believed to ensnare victims through its great sexual attraction and potency. Wagley reports that in the town of Ita the porpoise is thought to emit the high whistling sound characteristic of the Munduruci Turupari, although there is no indication that the porpoise is identified with the spirit.* Brazilian neighbors of the Munduruci also believe in the magical power of the porpoise, and it is quite possible that the Indian concept of the porpoise type Turupari was borrowed from the civilized population. If this is true, we are presented with the seeming paradox whereby aboriginal culture elements have been spread by people having a basically European culture. This

* Wagley, 1953, p. 240.

11: Murphy E-5 (1952-1953) 1958
SQ13 Mundurucu SQ13

phenomenon is not at all unusual in South America; Wagley and Galvão report the Tenetehara belief in the demon, Jurupari, to have been borrowed by the Indians from the local Brazilian population.[7] Similarly, the Tupinambá culture hero, Tupan, became a mythological figure in many Brazilian tribes through the active agency of the Jesuits.

Another instance of this type of diffusion and syncretism may exist in the Mundurucú belief that the *Turupari* take the souls of their victims in order to recruit their own ranks. This may well be an aboriginal idea, but it corresponds suspiciously to the classical missionary teaching that the souls of sinners are taken by the *Turupari*, or Devil.[8] The absence of any concept of sin in the Mundurucú belief is not surprising, for missionaries have labored for generations without noticeable results, to inculcate the idea of sin and punishment among them.

The *Turupari* attack all people regardless of age or sex, but a class of spirits known as *aiké* is dangerous only to infants. There are hordes of *aiké* wandering over the earth, for the shadows of all people turn into this spirit upon death. Only the transformed shadows of little girls are dangerous to infants, however. The Mundurucú believe that these *aiké*, like all little girls, want to take the children for themselves, and they rob the child of its life to do so.

Like the *Turupari*, the *aiké* kills its victims by throwing a magical stone into them. The *aiké* is clearly visible to the shaman as a little person no more than a foot high; its skin is either black or white, and it is always very beautiful. To ordinary people unendowed with shamanistic powers, the *aiké* is visible only as a fleeting shadow. It is not at all remarkable, therefore, that anxious Mundurucú mothers often see *aiké* on the paths between the villages and the bathing places. These paths are considered to be especially dangerous, but the *aiké* also attacks in the village on days when most of the people are abroad, and only one or two women or girls remain in the village to tend the infants.

As a rule, the Mundurucú believe that safety from all supernaturals can be gained by numbers; the various malevolent beings are always especially dangerous outside the village and to the lone person. This idea functions to provide supernatural support for sociability and cooperation, and few Mundurucú hunt, fish, or garden alone, nor does any woman willingly go to bathe or draw water by herself. To be sure, there are other, more concrete and persuasive reasons for Mundurucú gregariousness, but supernatural concepts rationalize and support this aspect of the social structure.

The shaman must be called to cure an attack by the *aiké*, but there are also means by which such attacks can be prevented. Children are made immune by frequent baths in a solution of water and the crushed leaves of an unidentified shrub, and a piece of ginger root is almost always hung on the child's *tipoia*, or carrying sling, as protection against the *aiké*. Also, mothers bite off and spit out pieces of the ginger root as they walk along the paths between the villages and the bathing places in the belief that this will avert molestation by the spirit.

[7] Wagley and Galvão, 1949, p. 103.

[8] It is equally possible that this represents a modification of an aboriginal concept of the Turupari. Métraux (1928, p. 58) notes the antiquity of this belief among Tupian groups, and the Mundurucú might well have shared this element.

11: Murphy E-5 (1952-1953) 1958
SQ13 Mundurucu SQ13

vine in hot water and applying the mixture to the stomach. The other consists of the trunks of very young buriti palms crushed in water. Part of this mixture is drunk; and the rest is applied externally to the torso of the sick person.

8. *Ok pipé*, or intestinal pain, is caused by the same *ewaö* as *ipon pipé*, or stomach-ache. However, the term *ok pipé* is in reality reserved for dysentery, for it is always accompanied by severe diarrhea. The medicines used for stomach pains are considered effective in the relief of intestinal pains also, but two additional cold remedies are used as specifics for the diarrhea. The roots of a certain shrub are boiled in water, part of which is taken internally and the rest allowed to steam below the hammock. The leaves of this shrub are also applied to the abdomen as a poultice. The same use is made of the leaves of the muriri pagé, a water plant. The local Brazilians also boil the leaves of this plant and place the steaming pot below the hammock of a bewitched person. The vapors are believed to cause an evil object to fall out of the victim's body.

9. *A pipé*, or headache, is treated by mixing *envira de castanheira* in water and applying the solution to the head. Unripe Brazil nuts are also grated into water and similarly applied. Both remedies are considered cold. The nature of the *ewaö* that causes headache was not known by the informants interviewed.

10. The tenth and last ailment in a three-stage sickness generally known by the name applied to its first stage, called *ajuwaö*. In this primary phase, the afflicted man or woman becomes unhappy and listless and eats mud, soap, and other inedible substances. The symptoms increase in severity in the next stage, or *pusáá*, and the victim becomes thin, yellow, and "bloodless." Finally, the patient passes into the state known as *tauhokot*, at the end of which he usually dies. During the final illness, the person's soul sometimes becomes one of the dreaded wandering souls. The symptoms are descriptive of the chronic forms of a number of illnesses, such as malaria, dysentery, and jaundice. The Munduruú attribute it to a *ewaö* made of roasted earthworms rolled into a ball and spread in the air. No remedies were known.

A person can be afflicted by more than one *ewaö* at a time, and the shaman often recommends a number of herbal preparations. The shaman does not himself administer these remedies, but instructs the kinsmen of the sick person in their use. They then collect the proper herbs and apply them.

The techniques used by the Munduruú shaman are so widely distributed throughout eastern South America that any attempt to trace their provenience would be overly lengthy. The shaman's use of tobacco smoke and the techniques of sucking and massage are almost universal in the Amazon area. Of equally wide distribution are the use of herbs and the various methods of applying them. Infusions, external applications, and steam baths are, as Lowie indicates,[1] known among a number of tribes of the region.

One aspect of Munduruú herbal medicine worthy of further discussion is the division of remedies into hot and cold categories. This distinction is made throughout most of Latin America with regard to both medicines and food. The Mun-

[1] Lowie, 1946, pp. 33-42.

11: Murphy E-5 (1952-1953) 1958
SQ13 Munduruca SQ13

279 1/71 Munduruú, however, do not classify their foods in this manner, suggesting that the concept was perhaps borrowed from their Brazilian neighbors together with certain medicinal recipes. Furthermore, although the list of diseases and remedies is undoubtedly incomplete, it is significant that only twenty-four herbal medicines were reported. A much longer list could be collected among rural Brazilians of the area, who also use most of the same herbs employed by the Munduruú.* This leads immediately to the question of whether the civilized inhabitants of the Amazon borrowed the medicinal preparations from the Indians or whether diffusion operated in the reverse direction. Although the use of herbs by the Indian population of the Amazon is undoubtedly a pre-Columbian practice, and although diffusion probably operated in both directions, it is very possible that the greatest borrowing was by the Indians. This is probably true for the Munduruú, although we cannot be so certain for the first Indian groups encountered by the Portuguese. The herbal knowledge of these coastal tribes is, of course, crucial to the question.

753 The Munduruú theory of disease exists side-by-side with certain sound empirical observations on the subject. They are well aware that epidemics are contracted through contact with white people. For example, when either my wife or I caught a cold, the Munduruú avoided close proximity to us. Even on those occasions when we fell ill after an epidemic had already developed in the village, they were inclined to blame us. Also, they recognized that residence along waterways or near swamps was often accompanied by fevers (malaria), and they knew that the savannah villages were therefore more salubrious. Both contagion and the unhealthfulness of certain locales were loosely connected with the prevalence of the sorcerer's evil objects, or *caxil*, despite the contradiction implied. However, in this as in many other lines of thought, the Munduruú do not push logic to its conclusion, for the roots of the supernatural concepts are social and not intellectual. The empirical observations and supernatural concepts coexisted with little effort on the part of the Munduruú to integrate them, if, indeed, they were aware of the mutual antipathy of the two.

757 755 Moreover, despite their supernatural explanation of disease, the Munduruú freely sought the rational medication, that we provided. Every day, a number of people came to our house for treatment, some from other villages; in only a very few cases did we have to seek out the sick and persuade them to accept our aid. Our experience in this matter was not unique, for both the mission and the Indian Post frequently kept quantities of medicine on hand for patients. Not even the shamans resisted treatment; many were, in fact, our most faithful patients.

There are a number of reasons for this lack of resistance to Western medicine by the Munduruú. Through long contact with the whites, they had come to recognize the efficacy of the white man's medicines, especially in the treatment of diseases they knew to be associated with the civilized population. Some even knew the names of specific remedies; I had the unusual experience of having a tattooed, wrinkled Indian ask me for "sulfa."

* Note also the many herbal remedies reported by Wagley (1953, pp. 161-162) from the Amazon River town of Itá.

11: Murphy E-5 (1952-1953) 1958
SQ13 Muhdurucu SQ13

Periquit, the young man who makes an incredible journey through the forest and returns home more animal than human. The Mundurucú visualize themselves as hunters and voyagers of the forest, and the odyssey of Periquit has deep meaning for them. They are also warriors, and several of the tales abound with head-hunting episodes and warfare. And some are tales of interminic strife, which, to a Mundurucú, is one of the most horrible eventualities imaginable.

The reader familiar with European mythology will recognize many thematic similarities, either independently invented or diffused, in Mundurucú tales. And the student of lowland South American mythology and folklore will see in the Mundurucú another example of the widespread dissemination of tales, in whole or in part, throughout the area. No attempt has been made toward any exhaustive distributional analysis of this material, and only a few of the more interesting parallels have been noted.

The Karusakaibi Cycle of World Creation

The major creation legends of the Mundurucú revolve around the figure of the culture hero, Karusakaibi. Métraux has made the apt suggestion that this personage merits the title of "transformer" rather than "creator" and compares him to Maire, a figure widespread in Tupian mythology.[1] But apart from this rough similarity of roles of the two culture heroes, the Mundurucú creation legends seem to be quite divergent from those of most other Tupian groups. The Tupian grandfather personage, subsumed under the names of Monan, Ma'ira-Monan or Sumé, is absent, as are the twins commonly found in Tupian creation myths.[2] Despite these points of difference in the structure of the tales and in the main actors, there are numerous parallels of episode and theme between the Mundurucú creation cycle and the oral literature of Tupian and other South American groups.

The first story of the Karusakaibi legend shows a marked resemblance to a Christian-influenced tale collected by Wagley and Galvão among the Tenetehara and entitled by them, "Creation of Wild Pigs."[3] In both Tenetehara and Mundurucú versions, a culture hero imprisons a group of people in a wall of feathers and converts them into peccaries. Other Tenetehara resemblances include the widespread emphasis on the tapir as a symbol of virility, as derived no doubt from the size of the genitalia of the male of the species. In one Tenetehara story, a woman marries a tapir,[4] and in the corresponding Mundurucú tale the culture hero transforms his sexually precocious son into that animal. Another widely distributed theme is found in the discovery of humans in the underworld. Nimuendajú relates an Eastern Timbira story in which the discovery is made by a man digging for an armadillo,[5] whereas in the Mundurucú episode the armadillo

[1] Métraux, 1939, p. 37.

[2] The Mundurucú denied all knowledge of episodes concerning twins and even claimed that twins were an unknown phenomenon in their own society. It is interesting to note that though other forms of infanticide were freely admitted, they specifically disavowed the killing of twins. They are not and were not a genetically isolated population, and I assume that the practice exists but that there was very strong resistance to giving this information.

[3] Wagley and Galvão, 1949, p. 134.

[4] Wagley and Galvão, 1949, pp. 140-142.

[5] Nimuendajú, 1946, pp. 247-248.

11: Murphy E-5 (1952-1953) 1958
SQ13 Mundurucu SQ13

773 538 171 himself makes the find. In the further development of the Mundurucú story the culture hero pulls a number of peoples out of the underworld, but his cord breaks and many are left behind. This theme is distributed beyond South America, as in the Magic Flight passage found in the first tale of the Karusakaibí cycle.

1. KARUSAKAIBÍ AND THE WILD PIG

A539 In times long past, Karusakaibí lived in the village of Uacupari. This settlement was not at the site of the modern Uacupari, but was near by.

During one dry season Karusakaibí and all the people of the village were out hunting in the forest, where they lived in temporary lean-tos. That of Karusakaibí was separated from those of the other people, and he stayed there alone with his son Korumtan. The people killed a great deal of game, but in that time there were no tapir, wild pig, or vaudo capoeira; the only equivalent of the wild pig was the cutiri. Karusakaibí, however, hunted the xambú bird to the exclusion of all other game, and every day he sent Korumtan to the lean-tos of his sisters to trade his kill for game that their husbands had taken. On the first three days that Korumtan went to the lean-tos of his aunts, they said to him, "We do not have any meat, but we will get you some." On the fourth day the aunts became angry with the boy and said to him, "Your father hunts only xambú which is no good to eat, and we always have to give you food. We do not have any." Korumtan began to cry and went away. The sisters called him back, offering him food, but he would not return.

The boy returned home crying, and Karusakaibí asked him what had happened. He replied that the aunts had scolded him because the xambús did not please them. Karusakaibí said, "They will pay for this," and sent his son outside to gather the feathers of the parrot, the uritim, the jacú, and the xambú and to bring them back to him. There were many feathers outside, for Karusakaibí had killed many birds, and the boy gathered them and brought them back. The father then transformed his son into a small bird, the tauhirapajpat, and sent him out to surround the lean-tos of all the other people with the feathers. In this disguise, Korumtan flew around the lean-tos and planted the feathers in the ground, quills first. As he went about his task, he sang the song of the bird. He was nearly out of feathers when someone in one of the lean-tos called out, "Who is that singing out there," and threw a piece of burning firewood at him. The boy flew away and returned to his father.

Karusakaibí asked the returned son, "Did you put all the feathers in the ground?" The boy said that he had not finished, and his father sent him out for more feathers. He replenished his supply and finished his task in two more days.

Upon completion of his chore, Korumtan reported to Karusakaibí, and the latter told him, "Now go back and tie the feathers together at the top." For this purpose he transformed the boy into a frog and made the feathers grow to a great size. The boy, in the guise of a frog, returned to the encircled lean-tos and climbed a tree, singing the song of the frog, "pik, pik, pik . . ." as he tied the tips of the feathers together. When he finished, the lean-tos and their environs

11: Murphy E-5 (1952-1953) 1958
SQ13 Munduruca SQ13

multitude of other beasts of every species who were also pursuing the woman and her daughter, intent upon eating them. 539x

After the frog had shot and killed all the animals, he ordered the woman to skin them and to put their meat on the babirussi and their hides in the fire. She did this, and there were so many that she was completely blackened with soot when she finished. Then the frog told her, "Go take a bath, but look only upstream and do not look behind you." He did not explain this order to her. The woman went to the stream and bathed, and the dirt from her body turned the stream black. This dirt was acting upon the fish like timbó, and they began to come to the surface, batting their tails three times before dying. The woman heard this sound and turned around to see what it was. All the fish immediately came back to life again and swam away. At this point the frog came down to the stream to collect the dead fish. When he saw that there were none, he asked the woman if she had looked around. She admitted that she had, and the frog told her that if she had not done this people would not have to go into the forest in search of wild timbó. Instead, fish would have been killed by the dirt from the bodies of bathing women.

35. The Man Who Lived on Smoke

There was once a man whose only food was tobacco smoke. Without tobacco smoke he would die. He was so dependent upon tobacco that, when he ran out of it, he filled a gourd with smoke and drank from it.

One day he went to the forest to get Brazil nuts and brought along some tobacco and a gourd full of smoke. He smoked all the tobacco during the journey and began to drink the smoke from the gourd. He drank sparingly, but still he consumed all the smoke when only halfway up the tree. Since he could not live without it, he fell down to the ground dead. However, his body disappeared.

To this day people must plant tobacco only among the burned pieces of wood that lie about in the garden.

Tales of Animals and People

This last group of legends includes a somewhat varied assortment of stories that concern animals or people or, commonly, the two in interaction. The first story explains that dogs originated from a union between a girl and a dog in human form. Two other stories also deal with the domesticated dog. In tale 37 two dogs burst out of the eyes of a burning demon, and tale 50 tells how the inhabitants of the Land of Dogs took revenge upon a Munduruc by feeding him human excrement. 538

Tales 37 to 40 are united by the common theme of hostility between father-in-law and son-in-law, an antagonism that seldom erupts into open quarrels in Munduruc society. The story entitled "The Origin of the Alligator" tells of a man who eats his son-in-law, but who is finally outwitted by a son-in-law who escapes a series of traps. The structure of the tale bears a strong resemblance to a Tenetehara legend about a vulture father-in-law* and to two Tukuna myths 538 171 606

* Wagley and Galvão, 1949, pp. 130–131.

11: Murphy E-5 (1952-1953) 1958
SQ13 Mundurucu SQ13

collected by Nimuendajú.[a] "The Man Who Married the Guariba Monkey" is in many respects almost identical with a folktale of the same name reported by Roth from the Arawak of British Guiana.[b] An interesting note in the Mundurucú version is an incestuous union between the monkey-woman and her son. Tale 39 deals with the mucura father-in-law's attempts to imitate the feats of his nonhuman son-in-law and his consequent death. The story is clearly linked to the Tenetehara "Opossum Takes a Son-in-law."[c] Another variation of the theme of union between two species is found in tale 40, in which the deer unknowingly marries a jaguar-girl. A similar story is reported from the Tukuna;[d] both Mundurucú versions include an episode in which the son-in-law must maintain a normal demeanor in the face of the wife's family.

Included in the following collection are four stories about the land tortoise, a notorious prankster in the folklore of the Amazon. Tales about the land tortoise are well represented in collections of Brazilian oral literature, and Charles F. Hartt devoted an entire volume to these stories.[e]

Three stories concern humans who made love to animals. Although this is a common theme in the region, it is worth while to note that the Mundurucú story of a man's love for a sloth has parallels in Cavina[f] and Guiana Arawak[g] folklore. Also, stories of a liason between a woman and a snake are found among both the Mundurucú (tale 49) and the Tenetehara.[h]

The last two stories in this section are of great interest. Tale 57 is an obvious rendition of the story of Hansel and Gretel, although the actors are spiders, and the wicked witch appears as a Yurupari. It should be noted that the cruel stepmother is missing in the Mundurucú version, as she is in the legend "Babes in the Wood," collected by Wagley and Galvão among the Tenetehara.[i] Finally, it is fitting that the last Mundurucú myth (58) to be related should be the one that explains their acceptance of the whites. Although the idea that the Mundurucú once owned the present site of the city of Belém has no basis in truth, it is quite accurate to attribute their involvement with the whites to their desire for manufactured articles. This realism is consistent with the common recognition of the modern Mundurucú that needs are cumulative.

36. ORIGIN OF THE DOG

Dachekrú had arrived at her first menses. She therefore stayed in the house alone when her mother went to the garden and her two brothers set out for the hunt. After they had all left, a young man entered the house. His name was Karupitabí, and he was not a human at all but a dog in human form. However, at that time there were no dogs in the villages of people as there are today.

[a] Nimuendajú, 1952, pp. 145–146.
[b] Roth, 1915, p. 71.
[c] Wagley and Galvão, 1949, pp. 131–134.
[d] Nimuendajú, 1952, p. 150.
[e] Hartt, 1875.
[f] Nordenskiöld, 1924, p. 290.
[g] Roth, 1915, p. 204. This story is slightly variant in that a woman loves a male sloth.
[h] Wagley and Galvão, 1949, p. 149.
[i] Wagley and Galvão, 1949, pp. 163–165.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

161 of the extent of the population from the German explorer Karl F. P. von Martius's figure of 18,000 to 40,000 Mundurucú in 1819 and from the Brazilian traveler Antonio Tocantini's calculation of 18,910 in 1875. Henri Coudreau, a French explorer, reported the Mundurucú population of the upper Tapajós River to be 1,429 in 1895; this estimate is undoubtedly more realistic than the previous two, but it is probably too low, for it is unlikely that the Mundurucú should have lost only 200 of their number in the past half-century. My own calculation of the number of Mundurucú in the upper Tapajós area in the mid-nineteenth century is approximately 5,000. This figure is based on the number of villages at that time—about 25—and their probable average populations—about 200 each; it is admittedly a guess.

648 [181] The Mundurucú enjoy a solid position of importance in the history of the Amazon Valley. Now friendly and docile rubber collectors and horticulturists, they were once the most warlike tribe of the region. A series of attacks on Portuguese settlements on the Amazon brought retaliation by the colonial troops in 1795, and thereafter the Mundurucú were the friends and military allies of the whites. The capitulation of the Mundurucú was a recognition of both superior force and the material advantages to be derived from intercourse with the whites. The Mundurucú continued their pursuit of warfare against other tribes, although occasionally as mercenaries of the colo- [727] nists. Their special fame derives from headhunting, one of the major goals of their wars.

• 171 [273] Some customs and institutions might be mentioned that distinguished the Mundurucú from their Tupian neighbors. The Mundurucú have never manufactured any of the common intoxicants of the region, although they are now fond of alcoholic beverages. In the sphere of material

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

culture, the planting and use of cotton were introduced after their contact with the whites, and their only watercraft were bark canoes of the type the German ethnologist Karl von den Steinen saw in the upper Xingú.[4] The moiety-phratry-clan system of Munduruçú social organization is considerably more complex than most Tupian societies, and the system of kinship nomenclature is correspondingly divergent. Munduruçú religion follows the broad outlines of supernatural beliefs and rites of the area, but there are significant differences in mythology.

These are only a few points of dissimilarity between the Munduruçú and the other Tupian tribes of the coast and lower Amazon region, but when considered with the linguistic data, they are sufficient to suggest a considerable period of independent development. There are also fundamental points of similarity: subsistence techniques are much akin to those found throughout the tropical-forest region of South America, and the Munduruçú are a village-dwelling people. And in common with other tribes of the area, class stratification is absent, political controls are simple, and the fundamental organization of the society is established along lines of kinship.

Certain characteristics lead me to suspect that the Munduruçú may have originally dwelled south of their present habitat. Their lack of cotton and the dug-out canoe and the absence of cannibalism and alcoholic beverages suggest that they may have come from the Planalto de Mato Grosso. Also, although they were and are industrious horticulturalists, their supernatural beliefs and ceremonies are only marginally concerned with cultivation; their major emphasis in ritual is on hunting. One other factor suggests a more southerly origin. The traditional Munduruçú villages were situated in the northernmost savannah coun-

[4] Steinen, 1894, pp. 223-223.

12:Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

try of the Tapajós River. To the north, the terrain is covered by dense rain forest, but south of the Munduruc country are great stretches of savannah that continue into the Planalto de Mato Grosso. Their distinct preference for unforested village locales could only have been acquired in their present home or further south. The previously mentioned cultural characteristics suggest the latter, although I can at present offer no further corroboration of this possibility.

Although the Munduruc regard their traditional homeland as the area of mixed gallery forest and savannah between the Cururú and Tropas rivers, only about 300 of the 1,250 surviving Indians live there. Another 700 live along the banks of the Cururú itself, and approximately 200 on the Tapajós River and tributary streams. The person in search of the exotic would be sorely disappointed at his first contact with the Munduruc. They dress in Western style garments, albeit ill-fitting and ragged, and they adorn themselves with glass beads, brilliantine, plastic combs, and religious medallions. The five-gallon gasoline can is a far more important artifact than the clay pot, and they cook in aluminum pans. Since the Indian strain is so strong in the genetic make-up of the north Brazilian, the Munduruc do not stand out sharply from their neighbors in physical characteristics. This is especially true of the younger Munduruc who are no longer tattooed from head to foot as their parents were.

The way of life of the Munduruc residents of the Tapajós shows is especially close to that of their Brazilian neighbors. That the fundamental methods of farming and fishing are similar among both populations is not surprising, as north Brazilian subsistence techniques are largely Indian-derived. But beyond that, the Tapajós-River Munduruc live in single-house isolation and not in villages

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

4

kinship and marriage

One of the major points of discontinuity between the Munduruc[u] and other Tupian-speaking peoples lies in the realm of social organization. The existence of exogamic unilineal descent groups was first reported by Mrs. Louis Agassiz, who visited the Munduruc[u] of the lower Madeira waters in 1865 and wrote: "The tribe is divided into certain orders or classes. . . . Marriage is forbidden . . . between members of the same order." [1] Farabee, who traveled on the Tapajós in 1915, confused the picture somewhat in his report that the Munduruc[u] were divided into two classes of "war chiefs" and "peace chiefs" that intermarried.[2] The actual situation was clarified in a paper written by Albert Kruse, O.F.M.,[3] one of the priests of the Cururú

[1] Agassiz, 1868, p. 220.
[2] Farabee, 1917, p. 137.
[3] Kruse, 1934.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

dependence from each other that is not conducive to marital stability. The husband may leave with little difficulty, and frequently does. The wife's lack of mobility makes it more difficult for her to break the marriage on her own initiative, but if the groom incurs the displeasure of the father-in-law, he is often told to leave. The divorced man either returns to his native village or wanders in search of another wife.

That the stability of Munduruc\u00fa marriages depends primarily upon the growth of affective bonds between the mates and a common interest in their children gives us a certain insight into the workings of the social system. There has recently been some discussion on the relation of marital stability to mode of descent and types of social unit, as revealed by comparative analysis of some selected African societies.[14] These have shown that marriage tends to be more enduring in patrilineal than in matrilineal groups and that this tendency is even more pronounced when the bride is incorporated into the membership of her husband's kin group. The Munduruc\u00fa are interesting just because they do not conform typologically to the African examples. Despite formal patrilineality, marriage is matrilocal and the man is thrust into affiliation with a cohesive unit of related kinswomen. His wife's primary loyalties are to her household; the husband's remain with the relatives of his natal household. The husband initially has no deep commitment to the wife's household and is under no strong influence to remain if he experiences difficulties with his wife or her kin. Thus far, the Munduruc\u00fa approximate the Hopi, for example, with the important exception that the latter are matrilineal also. In matrilineal-matrilocal societies of the Hopi type, every man maintains continuing rights and duties within his matrilineage, and these ties

[14] Cf. Gluckman, 1950; Schneider, 1953; Fallers, 1957.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

KINSHIP AND MARRIAGE

582 604 Munduruc kinship terminology indicates the custom of marriage between a man and his sister's daughter.[34] This avuncular form of union was frequently reported by early chroniclers in South America,[35] and is said by Oberg to exist among the contemporary Kamayurá of the upper Xingú River.[36] Martius specifically reported it to be practiced by the Munduruc when the sister's daughter had no other prospective husband.[37] Avuncular marriage is nowhere in evidence among the contemporary Mun- [935] durucú, however, and its practice, past or present, is vigorously denied. Informants regarded such a union as incestuous, despite the obvious fact that a sister's daughter is always of the opposite moiety from that of her uncle.

174 582 604 171 Since there is no reason to doubt the mutually corroborating distributional, documentary, and kinship-terminological evidence for sister's daughter marriage, we must assume that it has not only disappeared but has lapsed under such circumstances as to be absolutely proscribed. James Watson has noted a similar disappearance and taboo of sister's daughter marriage among the Cayuá Indians of southern Mato Grosso.[38] Although his evidence for its former practice is rather tenuous, he assumes it to have existed and to have fallen into abeyance due to the breakdown of the patrilineal extended family organization, and the union's consequent loss of function as a means of cementing relations between such units. Also, he assumes that marriages with the sister's daughter were commonly second unions, and the contemporary absence of polygyny would militate against the practice. Such rea-

[34] See pp. 83-84.

[35] Kinchiff (1932) presents the most complete discussion of this practice and contends that it was a common means of avoiding bride service.

[36] Oberg, 1953, p. 44.

[37] Martius, 1867, p. 383.

[38] Watson, 1958, pp. 118-121.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

soning may well be extended to the Munduruci custom of avuncular marriage, or to various types of preferential union in many societies undergoing such changes. On the subject of its taboo, however, Watson deduces that the sister's daughter marriage has fallen under a general Cayuá prohibition on marriages with close kin. This has obviously no relevance to the Munduruci situation, for no such prohibition exists among them, as the occasional cross-cousin union indicates.

I would prefer to advance an alternate explanation for the taboo, based on the proposition that there is often an incest taboo between co-residents, whatever their genealogical connection may be.[28] Given the shift in residence rules that has been noted, the mother's brother and his sister's daughter are co-residents, at least until the time of his marriage. Thus, a union with her would be endogamous to the household and would not only be disruptive of the good order of the residential unit, following Malinowski,[29] but would tend to isolate the household from the larger society, a point that Leslie White, among others, has stressed.[30] That sister's daughter marriage is congruent with a patrilocal residence rule would also, it might be added, lend confirmation to the thesis that the Munduruci are patrilocal.

KINSHIP TERMINOLOGY

Kinship is still an all-pervasive means of ordering social relations among the savannah Munduruci. Every person in the entire tribe is considered to be related to every other and is known to him and addressed by him by a kin term. Reference to the list below of kin terms used by males indicates how these relations are structured.

[28] Cf. Titiev, 1943, p. 518.
[29] Malinowski, 1930, p. 630.
[30] White, 1948, p. 25.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

601

we lit sister; father's brother's and mother's sister's daughters
da ú ũ father's sister's daughter
we ĩi mother's brother's son and daughter; sister's son and daughter
o pũ son; brother's son
o ru lit daughter; brother's daughter
rulerupebũ grandchildren (all categories)

582 601 [nil]

The vocative kinship terminology, male speaking, bears certain points of resemblance to the Tupí-Guaraní type system discussed by Wagley and Galvão.* It is bifurcate merging, and Ego has only brothers and sisters on his own generation. A significant departure from the generation principle is found in the equivalence of mother's mother and father's sister, both of whom are subsumed under the term *adjung*. The identification of these two relatives is continued in the referential system. This classification could come about as a result of the practice of sister's daughter, or avuncular, marriage operating in conjunction with the cross-cousin marriage expectable in a moiety system. With cross-cousin marriage, Ego's mother's father and the father's mother are brother and sister, and, when combined with avuncular marriage, Ego's father's sister is a possible wife for the mother's father. Thus viewed, Ego's mother's father's wife, or mother's mother, can be the same person as the father's sister.

Further support for this view comes from the referential terminology, which, I might suggest, is perhaps more conservative than the vocative. The mother's brother's children and the sister's children are referred to as *we ĩi*, a logical result if the mother's brother marries Ego's sister under the rule of avuncular marriage. To classify

* Wagley and Galvão, 1949.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

multiple factors are nearly always operative, perfect statistical correlations between any particular kinship determinant and the terminological features that it tends to produce should never be expected, even if the hypothesis is entirely sound."*

That the patrilineality of Munduruc6 society has been of some significance in structuring the terminological system may be inferred from the fact that the identical marriage practices have been found in South America in societies lacking unilineal descent groups and having ordinary bifurcate merging kinship systems.* Thus, the classification of the mother's brother's and sister's children as we ii follows in part from their membership in the moiety opposite to that of Ego. Similarly, the application of the referential term *o djuit* to the sons of the father's sister and the mother's mother recognizes their moiety affiliation and, also, the fact that both are sons of women classified as *adjaug*. The latter term, it will be noted, is applied to all older women of Ego's own moiety.

Extension of kin terms is complete in Munduruc6 society. Males of one's own moiety are addressed as "grandfather" (*adjat*) or "father" (*bat*), depending on age, while members of one's own generation are either "older" (*uaen pé*) or "younger (*o kit*) brother." On the descending generations there are only "sons" (*bekit*) and "grandsons" (*tapé*). Females of one's own moiety are called "aunt" (*adjaug*), if older. All other females of the same moiety are addressed as "daughter" (*da ú*).

In the opposite moiety, the Munduruc6 have "grandfathers" (*adjat*) on the second ascending generation and "grandsons" (*tapé*) on the second descending generation. All other males of the other moiety are addressed as

* *Ibid.*, p. 120.
* Cf. Oberg, 1953, pp. 44, 90; Gillin, 1938, pp. 95-96.

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

SOLIDARITY AND FISSION

459 The Mundurucú also take great pleasure in their ex-
468 cursions to the Tapajós River. Although their main busi-
577 ness is with their own patron, they often make side trips
648 to other trading posts. During these stays, they attend the *rezas*, or prayer sessions, held by the patron's wife, and usually are welcomed at parties given by Brazilians. They sleep wherever there is room to hang a hammock and spend the days helping the patron or merely watching what little activity there may be. In the evenings, the visiting Mundurucú go to the patron's house, where they are served demitasse coffee. After one or two weeks they go home.

• 171 Since the traders' trips to the Indians are infrequent,
648 and of short duration, these visits to the Tapajós shores constitute one of the principal means of learning the ways of the white men. The Mundurucú are extremely observant and sensitive to cultural differences. When in the houses of the traders, they usually remain silent except for an occasional exchange among themselves, but they watch intently and with interest. They are well aware of the [123] depth of cultural and linguistic differences, and they occasionally subjected me to lengthy, and quite intelligent questioning on the speech and manners of Americans.

191 Linguistic differences present a great barrier to cultural
648 interchange. Only a few Brazilians possess any fluency in Mundurucú, and competence in Portuguese is similarly limited among the savannah dwellers. Most of the men speak a few words of Portuguese and understand a somewhat greater number. But their vocabulary is largely limited to simple and common words and phrases and to the names of items of commerce. No extensive direct communication of ideas between Mundurucú and Brazilian takes place.

177 This linguistic gulf is partly bridged by those bilingual
648

12: Murphy E-5 (1952-1953) 1960
SQ13 Mundurucu SQ13

primary function is in mediating the dictates of the market to the Indians in a personalized and understandable idiom.

The external market cannot be taken as a constant factor in this study. For it is subject to the fluctuations and movements that characterize the history of capitalism. The returns that it offers are variable, and the inducement of the Indians to produce for it varies somewhat. But, more important, different commodities have been sought in the Amazon at different periods, and the form of labor that has gone into their production has accordingly changed. This has impinged not only on the division and organization of labor, but has altered fundamental residence rules, transformed the framework of every-day social relationships, and changed in size and constitution the basic groupings of the society. Munduruci society underwent one such major modification in the transition from patrilocality to matrilocality. And it is now undergoing a second in the destruction of unilocal residence and the fragmentation of larger village and familial units. Murdock* is fully corroborated in his observation that social organizations are most easily modified through a modification of the rule of residence—as he is in so many of his comments on relevant factors in social change. The rule of residence, in turn, varies with the productive relations in the ecological adaptation. It is in this way that the form of social groups is conditioned by their functions as units of production and consumption.

The transformations of the Munduruci social system can best be understood in terms of its structured relations with other social systems and the immediate means, technical and social, by which selected resources are exploited. That these factors have a broader relevance can be best

*Ibid., pp. 301–308.

12:Murphy E-5 (1952-1953) 1960
SQ13 Munduruc u SQ13

determined comparatively: cross-cultural studies of social and cultural change may well use the factors of ecological adaptation and types of relationship between social systems as constants. This is a different common denominator than the genetic one suggested by Fred Eggan as a means toward controlled comparison,[2] but it has been used by Steward and myself in a comparative analysis of the rubber-tapping Munduruc ú and the Indian trappers of Canada.[3] In the latter study, we attempted to demonstrate that the two populations experienced similar relationships with mercantilist, extraction economies, which entailed similar ecological adaptations. Both groups underwent disturbances of traditional patterns of postmarital residence; and both eventually underwent transitions in which the population became reorganized into loose aggregations in which larger bonds of economic dependency were transferred to patrons.

Finally the relevance of the present work for the study of "acculturation" must be considered, for I have given little attention to the borrowing of the symbolic forms of Western culture by the Munduruc ú. The term "acculturation" has had a varied history and much ink has been spilled over its definition. It is generally defined as comprising those changes that take place as a consequence of culture contact. Its application in the past, however, has usually referred to the absorption of the content of European culture by a primitive group. Acculturation studies have been characterized by a concern with the phenomenon of diffusion, although on a large scale, and with the processes through which the content of other cultures is accepted and incorporated. Although such studies are interesting and valuable, I have not chosen acculturation as

[2] Eggan, 1954.
[3] Murphy and Steward, 1956.

/4 cont./

114 Tocantins appears to have provided some additional material on Munduruká agriculture. But his work is not available to me at the moment.

*241 [22] The Handbook of South American Indians summarizes the subject in these few lines: "The Munduruká subsist partly on horticulture and partly on hunting, fishing and gathering. Tocantins' (1877) list of plants cultivated by them includes two species of manioc, sweet potato, pineapple, sugar cane, various peppers and beans, and several species of bananas. Other authors mention cotton, tobacco and genipa. Tocantins names some 30 noncultivated plants utilized in Munduruca economy." (6)

6. Herun, 1948: 272.

*241 12 [71] And this is all, more or less, that is known of these Indians' agriculture. The present article, therefore, attempts to amplify this knowledge, although the author is well aware that in many respects, and especially regarding garden methods, the Munduruká system does not differ materially from that of other tribes in the region, or in the Amazon basin in general. /5/ Practical experience in the matter teaches us that agriculture among the Indians of the Amazon forest allows for slight variations, but not for basic differences.

II. Garden methods

If we regard the agriculture of the Munduruká Indians as a culture complex, we can easily single out two distinct elements. One is the purely material, manual, or technical element, which will be discussed here. The other is made up of various social factors which render agriculture not a lifeless task or factor, lacking all influence, not an isolated complex within the tribe, but something vitally integrated into tribal life, something upon which the well-being of the community and of the family now depend. In this sense, [82] agriculture itself becomes a social element in native life. (7)

/15 cont./

*241 Also

192 pepper—achi, achi a, four varieties
262 banana—aka, 11 varieties
cotton—kuru, two varieties
urucú—tyuka, tyuka a
papaya—aiku a, two varieties

*241 There is, therefore, a small group of plants which are found in the gardens as well as out: pepper, bananas, cotton, urucú, and papayas.

[249] For certain plant species, such as for example tobacco and the curaná pineapple, a plot of ground is often set aside, or a small garden is prepared separately.

249 Aside from these plants, which are useful to subsistence, the Munduruká also have a certain number of vegetables which back-

[302] woodsmen call "smell" and which they use when they are bathing, to give their body, and especially their hair, a more pleasant odor.

[157] A few herbs are also cultivated for medicinal purposes. Others yet

[189] are used in the practice of certain superstitions and charms. Although I am aware that these subjects are not directly related to agriculture, I mention them in passing since "cultivated plants" are involved.

*241 From this list, it becomes clear that the Munduruká must have

177 had considerable contact with civilization and with other tribes to have acquired such a number of useful plants. As for the ancient stock of plants cultivated by the Indians in the Amazon forest, tubercles must be mentioned first and foremost. Moreover, /16/ it seems that the use of some of these typically native plants, such as for example curaná pineapple or sweet manioc, is not very old, for a series of tribes possessing a type of agriculture quite similar to that of the Munduruká are not yet familiar with the cultivation of sweet manioc or curaná pineapple. (?)

• [271] 16. Thus, for instance, the majority of the Carib tribes of the Brazilian Guianas are unfamiliar with the cultivation

/18 cont./

241 177 [171]

of sweet manioc, even though, in many respects, their agricultural system is quite similar to that of the Munduruku.

The first great influence of civilization unquestionably occurred during the nineteenth century, following the pacification of the [36] Munduruku, when they settled on the margins of the Tapajós. Through this contact, nearly all the plants cultivated on the lower Amazon became known to the Munduruku and were, for the most part, adopted [197] by them. The old mission of Bacabal must also have had some influence on this development. The new agricultural acquisitions, as well as their handling and usage, spread rapidly along the Tapajós, but very slowly toward the interior and especially toward the grasslands of Mundurucânia. The knowledge and use of manioc flour exemplifies this process. In the old days, the Munduruku were not familiar with manioc flour and made only tapioca cakes. Nowadays, even in the villages of the interior, they all make flour. But, as I said, manioc flour is a relatively recent acquisition. My informant Tomé told me the following: "My grandmother told me, one day, that in her childhood, in the villages (of the interior), they did not [259] know yet how to make flour. They only made tapioca cakes, which sometimes they even roasted on stone (slabs)...." This was at the most 80 years ago. The Munduruku of the Tapajós, on the other hand, being far more exposed to contact with civilization than the Munduruku of the central grasslands, were already quite familiar with manioc flour in those days and even prepared it for commercial purposes [39] Martius, Bates, and others, as we already indicated at the beginning of this work, speak of the important flour production and of the flour trading which the Munduruku of the Tapajós carried on with the traders of Santarém and of the lower Amazon. It seems obvious, therefore, that the spread of agricultural elements into the Tapajós region occurred /17/ at a rather uneven rate, and that in the case cited, in the villages of the interior, the making of manioc flour was acquired much later than in the villages of the Tapajós River. If this happened in connection with the more usage of a plant

241 177

/18 cont./

241 10. Replanting—yabi kudn or waraben yup maum. Once the garden has been torn up, that is, when the harvest is completed, the plot is abandoned and lies fallow. When the soil is very good, a replanting is attempted. The ground is again weeded and cleared, and if the need exists, the refuse of the field—branches or small shrubs—are burned. The new planting is done. This replanting process is also used in urgent cases, when the Indian is unable because of illness or some other circumstance to prepare a new plot. When a replanting is done with the sole purpose of taking advantage of the soil, a new plot is almost invariably cleared, although it is small and sometimes adjacent, merely enlarging the old one. The Indian knows perfectly well that the yield of a replanting is much smaller than that of a new garden. Because of this, he must supply the portion which the replanted ground will fail to produce. Frequently, the fallow or newly turn-up field is used merely to plant banana trees, if the soil is appropriate.

Nowadays, gardens are indispensable to the Munduruků's existence. He is still a hunter, a fisherman, and a gatherer of wild fruit. But without the gardens, he could not survive. He himself would regard as absurd the thought of subsisting mostly on hunting and gathering. He knows how to utilize his gardens and the plants he cultivates, extracting from them a series of by-products which contribute to his subsistence. (10)

241 171

10. It is rather interesting to compare the native agricultural methods with those of the peasants on the lower Amazon. Wagley, in his study of "Uma comunidade amazônica /An Amazonian Community/" (1957: 100 pp.), describes, in more general terms, the same procedure of garden clearing, planting, and cultivation, in short, of horticulture, among

/19 cont./

*24/ 191

the peasant population of "Bé." Let us note here /19/ merely some key terms: choice of the site and use of fallow plots (:101), clearing and felling (:103), burning and planting (:104), chief cultivated plants (:102), secondary cultures (:104), replanting (:104). This comparison, in fact, corroborates the statement by the same author that in the lower Amazon "the basic agricultural methods have changed little since aboriginal times" (:101). The Tenetehara, a Tupi tribe of Maranhão (Wagley and Galvão, 1949), also use agricultural methods and processes which are in many respects actually identical to those observed among the Munduruků.

III. Social factors

*24/ Since agriculture is one of the bases of Munduruků subsistence, it is not surprising that it should also be reflected in the social life of the tribe. Certain social factors /19/ are determined or influenced by the garden-agriculture complex. I shall allude chiefly to the threefold relationship of:

1. Garden and individual: the division of labor;
2. Garden and family: agricultural property and mutual assistance;
3. Garden and tribal group: intra-territorial migrations.

1. Garden and individual: the division of labor between the sexes

422 423 Among the Indians, there is ordinarily a rule or agreement whereby each person is the owner of what he acquires, makes, or produces.

/22 cont./ This cooperative labor exists in fact up to a point in the villages, and must be understood within the framework of the division of labor and its juridical bases, which apply first and foremost to the right to private or individual property. As regards garden matters, we are dealing with the joint task of two social elements, male and female, and their respective cycles of labor. Men and women, however, even after they marry and form a family, do not lose, through marriage, their individual property rights to their part of the garden, for the Indian is basically an individualist and does not recognize communal property rights. To compensate for this, they have recourse to a concept which we might call "right of indemnification" and which refers to the communal usufruct of the plot by the man, the wife, and, of course, the children for whom they are responsible.

It is well to explain this matter of plot ownership in greater detail.

I believe that it is necessary to make a distinction between the owner of the plot, and the owner of the labors performed on this plot and of the results obtained.

The land, in the forest and even within the area occupied by the tribe, has no owner. Anyone may clear a plot wherever he wishes. But once the site has been chosen, it becomes a property for the entire period while it is producing; it is then the man's property. After it has been abandoned, however, it becomes once more anybody's and everybody's land, unmanured land. /23/ (12) There only

12. Among the Tenetehara, also a tribe of the Tupi group, a similar phenomenon is observed. "Garden lands, that is to say, lands on which people have expended labor, are either individual or group property. During the time a man still has crops on the site, it belongs to him. But as soon as he has

/13 cont./

harvested all his crops and abandoned the land to the secondary growth which begins to cover it. It may be used by anyone." /Cited in English/ (Wagley and Galvão, 1949: 50).

241 423 [171]

exist, therefore, a temporary property right, while /the plot/ is being used: a right that might more aptly be termed of usage or usufruct.

This concept is complemented by the other facet of the matter, involving the labors /expanded on/ and the products of the plot. Included here is the aggregate of the men's and women's tasks (in accordance with the cycles of labor); and the family, which in itself forms a small community, asserts its rights.

241 421 462 594

The concept of this right to seemingly communal property derives from the division of labor between men and women. By individual right, each is the master and owner of what he produces, makes, etc. The man prepares the field, the clearing (kat), and is the owner of it. Strictly speaking, therefore, the woman plants on alien property (i.e., the man's or husband's) and pays him for the usufruct of this right, later on, with the produce of her planting. In other words: as indemnification for his preparation of the plot, the man or husband may share in the produce of her planting. On the other hand, the woman is the owner of the planting, and the man or husband cannot, according to the right of private property, enjoy the fruits of someone else's planting, even if it be his own wife's. He does, however, acquire a certain right to the planting, not of property but of usufruct, because his clearing labor made its existence possible. The woman thus has the obligation to allow her husband the usufruct of her planting, within the framework of the division of labor. We are dealing here, therefore, with reciprocal rights (or, inversely, duties) which are normalized and counterbalanced by the right of "indemnification." Indeed, in terms of the division of labor, this right of indemnification is absolutely necessary. What would the man do with the plot since he cannot plant, this being the woman's

/24 cont./

*241
476
421

assistance, on compensation for the labor rendered to the community. Aside from this statement about a collective garden, the informants also mentioned private family gardens, where they chiefly (but not exclusively) cultivated supplementary, accessory foods, such as bananas, pepper, etc. The data gathered, however, give no clear evidence as to whether this collective garden served for the communal, daily use of the group, or whether it merely existed as a reserve in case of need, in the assistance of the old and incapacitated, in the sustenance of guests, or as a ceremonial garden to contribute to important festivities. Regarding a type of garden among the Tenetehara, used communally but owned privately, see Wagley-Galvão (1948: 139).

*[171]

*241
496

members help each other; and each must assist the others, when their turn comes to prepare their plot. Thus there exists, with reference to this collective work, an elaborate system of revenue and compensation on an equalitarian basis. Days of labor are received, and later this assistance is repaid in kind with days of labor. We are dealing here, therefore, with a broad system of mutual assistance. Naturally, the owner of the new plot finds his chief support among /25/ his own kin: adult children, brothers, brothers-in-law, sons-in-law, etc. This mutual assistance, however, is not obtained spontaneously, but through personal invitations proferred individually rather than collectively. The manner of doing this is

[809]

/25 cont./

241 very simple: the assistance is requested and the day and other circum-
476 stances are set. There are no invitation dances or things of that sort. It is important for the owner of the plot to set the days of assistance, because he has to provide the mess for that day: meat, fish, tapioca cakes, drink. The continuity or interruption of garden labor depends on the acquisition of this food. When the men are many and the owner of the plot cannot get sufficient food, the work is done in shifts. The site is cleared for a day or two, and then the work is interrupted to hunt or to fish. The felling is done later in the same manner, "as the food comes," as they say. The breaks, or, inversely, the days of work, thus depend on the existing victuals or supplies. (14)

476
171

14. The custom of inviting neighbors and relatives to communal tasks and of setting the respective days also exists, in this same sense of mutual assistance, among the peasants of the lower Amazon. In the area of Santarém, Alenquer, Óbidos, etc., this is called puxirum, "to set a puxirum," "to go to a puxirum," etc. Undoubtedly, this custom has deep roots and originated in ancient times, when the lower Amazon still belonged to the Indians and their villages. In other areas, the puxirum is called ajuri (Negro River) or else mutirão (in the south of the country). Wagley (1949: 106) also reports this cooperative venture as putirão or "invitation." See also Caldeira, 1956.

241 This explains also why men and women, in turn, prefer to work
476 in groups: because they work at the invitation of the owner of the